

Prof. HALİS BİLGİL

Personal Information

Email: halisbilgil@kayseri.edu.tr

Web: <https://avesis.kayseri.edu.tr/halisbilgil>

International Researcher IDs

ORCID: 0000-0002-8329-5806

ScopusID: 6504499686

Yoksis Researcher ID: 120901

Research Areas

Mathematics

Academic and Administrative Experience

Director of Vocational School, Kayseri University, Mustafa Çıkrıkçıođlu Meslek Yüksekokulu, --, 2023 - Continues

Yüksekokul Kurulu Üyesi, Kayseri University, Mustafa Çıkrıkçıođlu Meslek Yüksekokulu, 2023 - Continues

Head of Department, Aksaray University, Fen Edebiyat, Matematik, 2021 - 2023

Head of Department, Aksaray University, 2016 - 2019

Assistant Director of the Institute, Aksaray University, 2013 - 2015

Head of Department, Aksaray University, 2011 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A Novel Fractional Forecasting Model for Time Dependent Real World Cases**
Erdinç Ü., Bilgil H., Öztürk Z.
REVSTAT STATISTICAL JOURNAL, vol.22, no.2, pp.169-188, 2024 (SCI-Expanded)
- II. **A mathematical model of mobility-related infection and vaccination in an epidemiological case**
Bozkurt F., Baleanu D., BİLGİL H.
COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 2024 (SCI-Expanded)
- III. **A fractional-order mathematical model based on vaccinated and infected compartments of SARS-CoV-2 with a real case study during the last stages of the epidemiological event**
Bilgil H., Yousef A., Erciyas A., Erdinc U., Ozturk Z.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.425, 2023 (SCI-Expanded)
- IV. **Application of Fractional SIQRV Model for SARS-CoV-2 and Stability Analysis**
Öztürk Z., Bilgil H., Sorgun S.
SYMMETRY, vol.15, no.5, pp.1048-1067, 2023 (SCI-Expanded)
- V. **A mathematical model with piecewise constant arguments of colorectal cancer with chemo-immunotherapy**
Bozkurt F., Yousef A., BİLGİL H., Baleanu D.
Chaos, Solitons and Fractals, vol.168, 2023 (SCI-Expanded)
- VI. **Analytical solution and flow topology in a lid-driven S-shaped cavity**
Bilgil H., Şafak İ., Ozturk Z.

PHYSICS OF FLUIDS, vol.34, no.12, 2022 (SCI-Expanded)

- VII. **An optimized continuous fractional grey model for forecasting of the time dependent real world cases**
Öztürk Z., Bilgil H., Erdinc U.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.51, no.1, pp.308-326, 2022 (SCI-Expanded)
- VIII. **New grey forecasting model with its application and computer code**
Bilgil H.
AIMS MATHEMATICS, vol.6, no.2, pp.1497-1514, 2021 (SCI-Expanded)
- IX. **Effect of the Reynolds number on flow bifurcations and eddy genesis in a lid-driven sectorial cavity**
Bilgil H., Gurcan F.
JAPAN JOURNAL OF INDUSTRIAL AND APPLIED MATHEMATICS, vol.33, no.2, pp.343-360, 2016 (SCI-Expanded)
- X. **Bifurcations and eddy genesis of Stokes flow within a sectorial cavity PART II: Co-moving lids**
Gurcan F., Bilgil H., Sahin A.
EUROPEAN JOURNAL OF MECHANICS B-FLUIDS, vol.56, pp.200-210, 2016 (SCI-Expanded)
- XI. **A note on exp-function method combined with complex transform method applied to fractional differential equations**
Guner O., Bekir A., Bilgil H.
ADVANCES IN NONLINEAR ANALYSIS, vol.4, no.3, pp.201-208, 2015 (SCI-Expanded)
- XII. **Optical soliton solutions for the variable coefficient modified Kawahara equation**
Bekir A., Guner O., Bilgil H.
OPTIK, vol.126, no.20, pp.2518-2522, 2015 (SCI-Expanded)
- XIII. **Bifurcations and eddy genesis of Stokes flow within a sectorial cavity**
Gurcan F., Bilgil H.
EUROPEAN JOURNAL OF MECHANICS B-FLUIDS, vol.39, pp.42-51, 2013 (SCI-Expanded)
- XIV. **A numerical approach to determine viscosity-dependent segregation in fresh concrete**
Bilgil A., Ozturk B., Bilgil H.
APPLIED MATHEMATICS AND COMPUTATION, vol.162, no.1, pp.225-241, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **A new application of fractional glucose-insulin model and numerical solutions**
Öztürk Z., Bilgil H., Sorgun S.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.42, no.3, pp.1-12, 2024 (ESCI)
- II. **A Fractional-order mathematical model to analyze the stability and develop a sterilization strategy for the habitat of stray dogs**
Ozturk Z., Yousef A., Bilgil H., SORGUN S.
INTERNATIONAL JOURNAL OF OPTIMIZATION AND CONTROL-THEORIES & APPLICATIONS-IJOCTA, vol.14, no.2, pp.134-146, 2024 (ESCI)
- III. **Fractional SIQRV Model for COVID-19 and Numerical Solutions**
Öztürk Z., Bilgil H., Sorgun S.
Konuralp Journal of Mathematics, vol.11, no.2, pp.131-140, 2023 (ESCI)
- IV. **Application of Fractional SPR Psychological Disease Model in Turkey and Stability Analysis**
Öztürk Z., Bilgil H., Sorgun S.
Journal of mathematical sciences and modelling (Online), vol.6, no.2, pp.49-55, 2023 (Scopus)
- V. **Stability Analysis of Fractional PSQp Smoking Model and Application in Turkey**
Öztürk Z., Bilgil H., Sorgun S.
New Trends in Mathematical Science, vol.10, no.4, pp.54-62, 2022 (Peer-Reviewed Journal)
- VI. **Application of Standard and Exponential Grey Forecasting Models on Turkey's Education Expenditures**
Akyuz L., Bilgil H.

- New Trends in Mathematical Science, vol.10, pp.9-19, 2022 (Peer-Reviewed Journal)
- VII. **GM (1,1) ve EXGM (1,1) Tahmin Modellerinin Türkiye'nin Ar-Ge Harcamalarına Uygulanması**
Akyüz L., Bilgil H.
Aksaray University Journal of Science and Engineering, vol.6, no.2, pp.95-106, 2022 (Peer-Reviewed Journal)
- VIII. **SIQRV Modeli ve Nümerik Uygulaması**
Öztürk Z., Sorgun S., Bilgil H.
Avrupa Bilim ve Teknoloji Dergisi, vol.2021, pp.573-578, 2021 (Peer-Reviewed Journal)
- IX. **New Exact Solutions of Conformable Time-Fractional Bad and Good Modified Boussinesq Equations**
Öztürk Z., Sorgun S., Bilgil H., Erdinç Ü.
Journal of New Theory, vol.2021, no.37, pp.8-25, 2021 (Peer-Reviewed Journal)
- X. **The Grey Forecasting Modelling and Its Application**
Bilgil H., Ozturk Z., Ozgul E.
Aksaray University Journal of Science and Engineering, vol.3, no.2, pp.75-81, 2019 (Peer-Reviewed Journal)
- XI. **Exact Solutions of Rosenzweig-MacArthur (RM) Model Equations by Using Exp Function Method**
Öztürk Z., Bilgil H.
Avrupa Bilim ve Teknoloji Dergisi, vol.2019, pp.427-433, 2019 (Peer-Reviewed Journal)
- XII. **Mathematical Estimation of Expenditures in The Health Sector in TURKEY with Grey Modeling**
Öztürk Z., Bilgil H.
ERCIYES UNIVERSITY JOURNAL OF SOCIAL SCIENCES INSTITUTE, vol.35, no.3, pp.52-58, 2019 (Peer-Reviewed Journal)
- XIII. **An application of khuri's biorthogonality condition on stokes flow in a rectangular cavity**
BİLGİL H.
Applied Mathematics E - Notes, vol.19, pp.456-464, 2019 (Scopus)
- XIV. **An Application Of Khuri's Biorthogonality Condition On Stokes Flow In A Rectangular Cavity**
Bilgil H.
APPLIED MATHEMATICS E-NOTES, vol.19, pp.456-464, 2019 (ESCI)
- XV. **Mathematical Modeling for Prediction of Heating and Air-Conditioning Energies of Multistory Buildings in Duhok City**
Zaya N. E., Hassan L. H., Bilgil H.
Academic Journal of Nawroz University, vol.7, no.4, pp.153-167, 2018 (Peer-Reviewed Journal)
- XVI. **EFFECT OF THE CAVITY ANGLE ON FLOW STRUCTURES IN AN ANNULAR WEDGE CAVITY**
Bilgil H., Dölek Z.
Konuralp Journal of Mathema, vol.3, no.2, pp.1-16, 2015 (ESCI)
- XVII. **EXACT SOLUTIONS AND PAINLEVE ANALYSIS OF NONLINEAR EVOLUTION EQUATIONS**
Özer M. N., Bekir A., Bilgil H.
HADRONIC JOURNAL, vol.28, no.4, pp.453-466, 2005 (Peer-Reviewed Journal)
- XVIII. **APPLICATIONS OF EXTENDED TANH METHODS FOR NONLINEAR EQUATIONS**
Özer M. N., Bekir A., Bilgil H.
HADRONIC JOURNAL, vol.28, no.5, pp.559-569, 2005 (Peer-Reviewed Journal)

Congress and Symposium Activities

5. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS, Session Moderator, Nevşehir, Turkey, 2023
9th International IFS and Contemporary Mathematics and Engineering Conference, Attendee, Mersin, Turkey, 2023